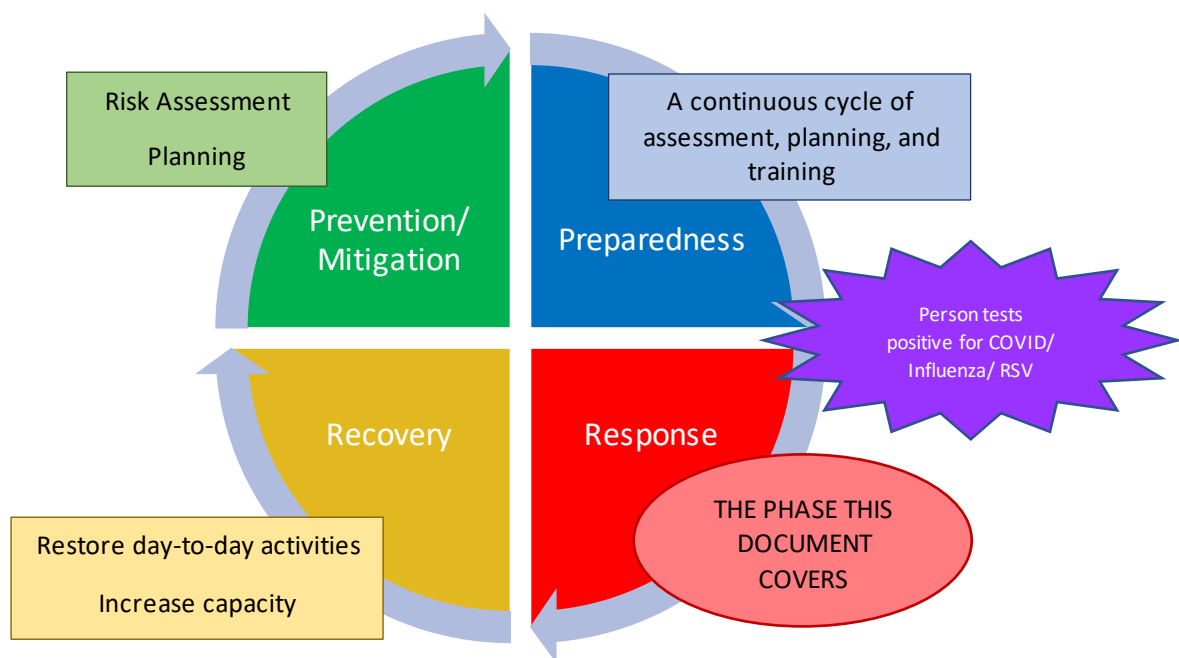


Respiratory Illness Outbreak Response Tool

For Use in Skilled Nursing Facilities

This document is intended to assist skilled nursing facilities (SNF) with taking steps to address an outbreak at their facility. The graphic below represents one way to manage a respiratory outbreak by breaking the steps into Response, Recovery, Prevention/Mitigation, and Preparedness. This document addresses the “Response” phase. The Response phase is initiated with the confirmation (or in some cases, suspicion) of a single case of a transmissible respiratory disease, including COVID-19, Influenza, or RSV, within the facility. This Response Tool can be used as part of a facility’s Infectious Disease Plan and could be utilized by staff and leadership to initiate mitigation and control strategies should the need arise.



Adapted from FEMA [“The Four Phases of Emergency Management”](#)

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*****While this document is organized in a step-by-step process for ease of understanding, these steps should be done as concurrently as possible. *****

Part One: Steps

Step 1: Resident Placement

General

Resident(s) Tests Positive!

- If a resident tests positive for a respiratory illness, immediately place that resident in transmission-based precautions.
 - Symptomatic residents who test negative for a respiratory pathogen should be tested for other common respiratory pathogens.
 - Without confirmation via testing, a resident should not be isolated with a confirmed COVID-positive individual.
- If a resident is symptomatic for a respiratory illness and awaiting test results, the resident should be placed in transmission-based precautions, until the illness is confirmed. Once the test results have been obtained, Transmission-Based Precautions (TBP) should be updated to reflect the illness. See “Step 2: Transmission-Based Precautions” for more detail.

[Infection Control: Severe acute respiratory syndrome coronavirus 2 \(SARS-CoV-2\) | CDC](#)

[CDC Prevention Strategies for Seasonal Influenza in Healthcare Settings](#)

[CDC Clinical Signs and Symptoms of Influenza](#)

[Transmission of RSV \(Respiratory Syncytial Virus\) | CDC](#)

COVID-19

SNF *with* a Tier 1 or Tier 2 COVID Relief Facility (CRF) Status

- If the resident was positive for COVID-19 on antigen or Polymerase Chain Reaction (PCR)/Nucleic Acid Amplification Test (NAAT) test,
 - Ideally, place that resident in a COVID unit.
 - In some situations, sheltering in place may be appropriate. (Do not cohort with a COVID-negative roommate.)
- While maintenance of at least one empty bed on an isolation unit during times without an outbreak is recommended, it is no longer required. However, without an empty bed to move residents to when they test positive, it may be difficult to separate COVID positive and negative roommates.

[MSA 21-40-NF-COVID-19.pdf \(michigan.gov\)](#)

[Numbered-Letter-L-23-13.pdf \(michigan.gov\)](#)

SNF *without* a Tier 1 or Tier 2 COVID Relief Facility (CRF) Status

- If a resident tests positive for COVID-19 on antigen test, immediately place the resident in transmission-based precautions.
 - Immediately find placement for this resident in a CRF Tier 2 or COVID Relief Center (CRC) facility.
- If placement cannot be found, contact the IPRAT team [Infection Prevention Resource and Assessment Team \(IPRAT\) \(michigan.gov\)](#) to apply for Tier I status [2022 COVID Relief Facility Application: Tier 1 - Retain Survey \(research.net\)](#) immediately.
- Do not shelter in place. Per the policy MSA 21-40, the facility must have permission to shelter in place from Behavioral and Physical Health and Aging Services Administration (BPHASA) (previously Medical Services Administration (MSA)) and be working with IPRAT toward obtaining a CRF Tier 1 designation.
- To find an appropriate facility to accept a covid positive resident, use the link below to go to the Michigan Long Term care page. Then select CRC and CRF programs. Links of current CRCs and CRF Tier 2 facilities can be found at

Guidance in this document is up to date as of July 18th, 2023.

[Long Term Care COVID-19 Plan \(michigan.gov\)](https://michigan.gov/long-term-care-covid-19-plan)

- When making decisions regarding placement of a resident utilize this resource.
[CRC-CRF-Decision-Flow diagram 05-04-22.pdf \(michigan.gov\)](https://michigan.gov/crc-crf-decision-flow-diagram-05-04-22.pdf)
- For questions regarding the CRF and CRC program, the policy is available [here](#). Contact the IPRAT team with any questions at mdhhs-iprat@michigan.gov.

Expansion

The facility has an isolation unit but needs more beds?

- When possible, the **best practice** continues to be cohorting of residents with infectious respiratory illnesses.
 - When additional beds are needed, ideally, utilize the rooms nearest to the existing isolation unit.
 - Ideally, dedicate equipment for use in the isolation area only.
 - Clean to dirty workflow should continue to be followed when equipment cannot be dedicated and when staffing shortages does now allow for designated staff.

The facility does not have an isolation unit but needs more beds.

- As mentioned above, when additional beds are needed, ideally, utilize the rooms nearest to the existing isolation rooms.
- There may be instances where a shelter in place model is most appropriate, whether for some or all residents positive for a respiratory infection.
 - If cohorting, only residents with the *same respiratory pathogen* should be housed in the same room. MDRO colonization status and/or presence of other communicable disease should also be taken into consideration during the cohorting process.
 - Strict adherence to hand hygiene and Personal Protective Equipment (PPE) use (as appropriate for the specific pathogen) is necessary and should be regularly audited when a shelter in place model is being utilized, due to the increased risk for transmission when cohorting is not utilized.
 - Consider limiting the number of staff who enter the isolation rooms. If staffing allows, decrease the potential for transmission by designating staff to care for residents on transmission-based precautions. If staffing does not allow for the use of designated staff, ensure all direct care staff are competent in their infection prevention education and training.
 - A standard precautions to TBP workflow should be followed (e.g., when taking vital signs or passing medications) to limit the potential for cross-contamination from isolation rooms to non-isolation rooms.

COVID Relief Facilities: COVID-19-specific Guidance

- Please note: Facilities are required to maintain a record of which beds were utilized for COVID care, including the exact dates a bed was utilized for the purposes of COVID-19 care as this detail may be required in future audit cycles.
- The MDHHS IPRAT Unit is available to support facilities with infection prevention guidance and best practices and may be contacted at MDHHS-IPRAT@michigan.gov.

[Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 \(COVID-19\) Pandemic](#) (Refer to “Resident Placement” section)

[Numbered-Letter-L-23-13.pdf \(michigan.gov\)](#)

Step 2: Transmission-Based Precautions (TBP)

Organism-Specific TBP

Standard Precautions should be followed in addition to any of the below Transmission -Based Precautions.

COVID-19 (SARS-CoV-2): Droplet-Airborne Precautions

- Ideally, person should be placed in a negative-pressure room.

<ul style="list-style-type: none"> ○ When a negative-pressure room is not available, consider the use of temporary portable solutions to create a negative pressure environment (such as exhaust fans). Work with an Infection Preventionist, if available, or Clinical Director and Building Maintenance/ Heating Ventilation and Air Conditioning (HVAC) contractor to ensure safe implementation. • Single room when available. • Consider alternative location for placement, if available, as indicated by facility Communicable Disease Management Plan and based on pathogen. • Prioritize persons with excessive cough for single-room placement. • Cohort persons who are infected with the same pathogen and type(i.e., COVID with COVID).
<ul style="list-style-type: none"> • Staff should wear a fit-tested NIOSH-approved N95 respirator, eye protection, gown, and gloves when entering the room. • The door should remain closed, if safe to do so. • Limit movement outside of the room by resident to medically necessary purposes. • Resident should wear a surgical mask if they are leaving the room.
Influenza: Droplet Precautions
<ul style="list-style-type: none"> • Single room when available. • Prioritize persons who have excessive cough and sputum production for single-room placement. • Cohort persons who are infected with the same pathogen and type(i.e., Influenza A with Influenza A). • If it becomes necessary to place persons who require Droplet Precautions in a room with a person who does not have the same infection: <ul style="list-style-type: none"> ○ Avoid placing them with persons who are at higher risk for adverse outcomes (e.g., immune compromised). ○ Ensure persons are physically separated (i.e., > 3 feet apart) and employ physical barriers (such as a privacy curtain) to reduce opportunities for close contact.
<ul style="list-style-type: none"> • Staff should wear a surgical mask when entering the room. Don eye protection per standard precautions. • Limit movement outside of the room by resident to medically necessary purposes. • Resident should wear a surgical mask if they are leaving the room.
RSV: Contact Precautions
<ul style="list-style-type: none"> • A single-patient room is preferred. • When a single-patient room is not available, consultation with infection control personnel is recommended to assess the various risks associated with other patient placement options. • In multi-patient rooms, ≥3 feet spatial separation between beds is advised to reduce the opportunities for inadvertent sharing of items between the residents. • Provide ample opportunity for residents to perform hand hygiene.
<ul style="list-style-type: none"> • Staff should don a gown and gloves when entering the room. Surgical mask should be donned per Standard Precautions. • Limit movement outside of the room by resident to medically necessary purposes. • Resident should wear a surgical mask if they are leaving the room.
General Concepts
<ul style="list-style-type: none"> • Consider broader mask use (universal source control) during an outbreak of respiratory illness in the facility, when SARS-CoV-2 or other respiratory viruses are circulating in the community, during respiratory virus season (October – April), or for staff who work in areas of the facility where there is an increased likelihood of encountering a person with undiagnosed illness. • Even when masking is not required by the facility, individuals should continue using a mask or respirator based on personal preference, informed by their perceived level of risk for infection based on their recent activities (e.g., attending crowded indoor gatherings with poor ventilation) and their potential for developing severe disease if they are exposed.
<ul style="list-style-type: none"> • If performing an aerosol-generating procedure (AGP) during an outbreak, ensure appropriate precautions are taken including, but not limited to: <ul style="list-style-type: none"> ○ Keep door closed during an AGP.

<ul style="list-style-type: none"> ○ Staff wear N95 respirator and other PPE per facility policy. ○ Limit the number of staff in the room to only those essential for the procedure. ○ Use AGP signage to alert others that an AGP is in process.
<ul style="list-style-type: none"> ● See Appendix 1 for AGP resources and Appendix 9 for AGP signage.
Precautions Appendix A Isolation Precautions Guidelines Library Infection Control CDC
<ul style="list-style-type: none"> ● A searchable list of pathogens and the associated transmission-based precautions.
Ventilation in Buildings , ASHE Temporary Negative Pressure Rooms

General Precautions

Preparation of the isolation room or area
<ul style="list-style-type: none"> ● Ensure that appropriate handwashing facilities and hand-hygiene supplies are available.
<ul style="list-style-type: none"> ● Stock the sink area with suitable supplies for handwashing, and with alcohol-based hand rub, near the point of care and the room door.
<ul style="list-style-type: none"> ● Post transmission-based precautions signage on the door indicating that the space is an isolation area. (See Appendix 9 for printable signage.)
<ul style="list-style-type: none"> ● Stock the PPE supply and linen outside the isolation room or area (e.g., in the change room). Setup a cart outside the door to hold PPE. A checklist may be useful to ensure that all equipment is available (see sample checklist below).
<ul style="list-style-type: none"> ● Place appropriate waste bags in a bin. If possible, use a touch-free bin. Ensure that waste bins are available inside and outside the residents' rooms to allow for appropriate donning/doffing procedure. Ensure that used (i.e., dirty) bins remain inside the isolation rooms.
<ul style="list-style-type: none"> ● Disinfect equipment upon exit from the TBP room.
<ul style="list-style-type: none"> ● Dedicate non-critical resident-care equipment (e.g., stethoscope, thermometer, blood pressure cuff and sphygmomanometer) to the resident, if possible. Thoroughly clean and disinfect resident-care equipment that is required for use by other residents before use.
<ul style="list-style-type: none"> ● Keep adequate equipment required for cleaning or disinfection inside or outside the isolation room or area, and ensure scrupulous daily cleaning of the isolation room or area.
<ul style="list-style-type: none"> ● Place a puncture-proof container for sharps disposal inside the isolation room or area.
<ul style="list-style-type: none"> ● Remove all non-essential furniture and ensure that the remaining furniture is easy to clean and does not conceal or retain dirt or moisture within or around it.
<ul style="list-style-type: none"> ● Keep the residents' personal belongings to a minimum. Keep water pitchers and cups, tissue wipes, and all items necessary for attending to personal hygiene, within the resident's reach.
<ul style="list-style-type: none"> ● Ensure that visitors consult the health-care worker in charge (who is also responsible for keeping a visitor record) before being allowed into the isolation areas. Keep a roster of all staff working in the isolation areas, for possible outbreak investigation and contact tracing.
<ul style="list-style-type: none"> ● Set up a telephone or other method of communication in the isolation room or area to enable residents, family members or visitors to communicate with health-care workers. This may reduce the number of times the workers need to don PPE to enter the room or area.

Supply Checklist for Isolation Room or Area *(see Appendix 10 for printable version)*

Equipment	Stock Present
On PPE Cart:	
Eye Protection (face shield or goggles)	
Gloves	
Particulate respirators (N95 or equivalent)	
Medical (surgical or procedure) masks	
Gowns	
Available in or near the room/area:	
Alcohol-based hand rub	
Plain soap (liquid, if possible, for washing hands in clean water)	
Clean single-use towels (e.g., paper towels)	
Sharps containers	
Appropriate detergent for environmental cleaning and disinfectant for disinfection of surfaces, instruments or equipment (Should be on the EPA List N)	
Large plastic bags in waste bins	
Appropriate biohazard bags	
Linen bags	

*Adapted from [World Health Organization: Infection Prevention and Control of Epidemic- and Pandemic-Prone Acute Respiratory Infections in Health Care](#)

Step 3: Outbreak Testing

Testing for Respiratory Symptoms

General:
<ul style="list-style-type: none"> Staff and residents with symptoms of COVID-19, regardless of the severity of symptoms or vaccination status, should receive a viral test as soon as possible. Consider testing for both COVID and Influenza at times when both are known to be circulating in the community as a person can be infected with more than one virus simultaneously. A full respiratory panel could also be considered.
COVID-19:
<ul style="list-style-type: none"> Asymptomatic staff and residents with close contact with someone with SARS-CoV-2 infection should have a series of three viral tests for SARS-CoV-2 infection. Testing is recommended immediately (but not earlier than 24 hours after the exposure) and, if negative, again 48 hours after the first negative test and, if negative, again 48

hours after the second negative test. This will typically be at day 1 (where day of exposure is day 0), day 3, and day 5.
<ul style="list-style-type: none"> • Testing is recommended at admission and, if negative, again 48 hours after the first negative test and, if negative, again 48 hours after the second negative test. In general, admissions in counties where Community Transmission levels are high should be tested upon admission; admission testing at lower levels of Community Transmission is at the discretion of the facility. • The residents should also be advised to wear source control for the 10 days following their admission. Residents who leave the facility for 24 hours or longer should generally be managed as an admission. • Due to challenges in interpreting the result, testing is generally not recommended for asymptomatic people who have recovered from SARS-CoV-2 infection in the prior 30 days. Testing should be considered for those who have recovered in the prior 31-90 days; however, an antigen test instead of a nucleic acid amplification test (NAAT) is recommended. This is because some people may remain NAAT positive but not be infectious during this period.
Influenza and Respiratory Syncytial Virus (RSV):
<ul style="list-style-type: none"> • Testing for influenza and/or RSV may be warranted if: <ul style="list-style-type: none"> ○ A person who has symptoms consistent with a viral respiratory infection tests negative for COVID-19. ○ If there is more than one person in the facility with onset of symptoms compatible with influenza infection within 2-3 days of each other. ○ If the results of the testing will change the outbreak control strategy in the facility. ○ If the facility includes persons at high-risk for influenza complications (e.g., persons > 65, pregnant women, persons with chronic lung or heart disease, or immunocompromised persons). • The local health department may direct the facility to test certain individuals based on current community indicators or incidence in the facility.
CDC Interpreting COVID Antigen Testing Algorithm Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 (COVID-19) Pandemic Interim Guidance for Managing Healthcare Personnel with SARS-CoV-2 Infection or Exposure to SARS-CoV-2 CDC Overview of Testing for SARS-CoV-2, the virus that causes COVID-19 CDC CDC Information for Clinicians on Influenza Virus Testing Guide for considering influenza testing when influenza viruses are circulating in the community CDC Influenza virus testing in investigational outbreaks in institutional or other closed settings MDHHS Respiratory Virus Outbreaks in Skilled Nursing Homes Flow Diagram

COVID-19: Contact Tracing Testing

Perform contact tracing to identify any staff or residents who may have had close contact with the individual with COVID-19 infection:
<ul style="list-style-type: none"> • All staff and residents who have had close contacts, regardless of vaccination status, should be tested as described in the testing section above. • Staff with higher-risk exposures should be managed as described in the below resource.

- **If testing of close contacts reveals additional staff or residents with SARS-CoV-2 infection**, contact tracing should be continued to identify residents or HCP with close contact to the newly identified individual(s) with SARS-CoV-2 infection.
 - A facility-wide or group-level (e.g., unit, floor, or other specific area(s) of the facility) approach should be considered if all potential contacts cannot be identified or managed with contact tracing or if contact tracing fails to halt transmission.
 - If the outbreak investigation is broadened to either a facility-wide or unit-based approach, follow recommendations below for broad-based outbreak testing.
- [Interim U.S. Guidance for Managing Healthcare Personnel with SARS-CoV-2 infection or Exposure to SARS-CoV-2.](#)

COVID-19: Broad-Based Testing

A broad-based (e.g., unit, floor, or other specific area(s) of the facility) approach is preferred if all potential contacts cannot be identified or managed with contact tracing or if contact tracing fails to halt transmission.

- Perform testing for all residents and HCP identified as close contacts or on the affected unit(s) if using a broad-based approach, regardless of vaccination status.
 - Testing is recommended immediately (but not earlier than 24 hours after the exposure) and, if negative, again 48 hours after the first negative test and, if negative, again 48 hours after the second negative test. This will typically be at day 1 (where day of exposure is day 0), day 3, and day 5.
 - Due to challenges in interpreting the result, testing is generally not recommended for asymptomatic people who have recovered from SARS-CoV-2 infection in the prior 30 days. Testing should be considered for those who have recovered in the prior 31-90 days; however, an antigen test instead of a nucleic acid amplification test (NAAT) is recommended. This is because some people may remain NAAT positive but not be infectious during this period.
- In the event of ongoing transmission within a facility that is not controlled with initial interventions, strong consideration should be given to use of empiric use of Transmission-Based Precautions for residents and work restriction of HCP with higher-risk exposures. In addition, there might be other circumstances for which the jurisdiction's public authority recommends these and additional precautions.
- If no additional cases are identified during contact tracing or the broad-based testing, no further testing is indicated. Empiric use of Transmission-Based Precautions for residents and work restriction for HCP who met criteria can be discontinued as described in Section 2 and the Interim Guidance for Managing Healthcare Personnel with SARS-CoV-2 Infection or Exposure to SARS-CoV-2, respectively.
- If additional cases are identified, strong consideration should be given to shifting to the broad-based approach if not already being performed and implementing quarantine for residents in affected areas of the facility. As part of the broad-based approach, testing should continue on affected unit(s) or facility-wide every 3-7 days until there are no new cases for at least 14 days.
- If [antigen testing](#) is used, more frequent testing (every 3 days), should be considered due to the decreased reliability of results in asymptomatic persons. Consider collaboration with the local health department for testing supplies and staff to perform testing if needed
- Collaborate with local public health authorities to determine the frequency and duration of testing.

Testing for Influenza and RSV:

In settings with [persons at high-risk of complications](#) from influenza or RSV, a single case of suspected *Influenza* or *RSV* is sufficient for triggering testing and consideration of prompt implementation of infection prevention and control measures, including active surveillance for new illness cases.

- With a single case of confirmed influenza or RSV in the facility, increase monitoring of all clients for symptoms of respiratory illness.
- Test any client with acute onset of respiratory symptoms with or without fever, particularly if Influenza or RSV are circulating in the community.

Guidance in this document is up to date as of July 18th, 2023.

- Collaborate with medical provider/s to determine if antiviral treatment is appropriate for individuals with symptoms and/ or those with a known exposure (post-exposure prophylaxis). **Influenza antiviral treatment is most effective if administered within 48 hours of onset of symptoms.** Treatment can be started prior to receiving test results.

- Interpretation of test results should consider the clinical presentation (symptoms) of the person being tested, the method of testing, and the circumstances under which the test was performed (symptomatic and/ or as part of an outbreak investigation). (See [Algorithm to assist in the interpretation of influenza testing results and clinical decision-making during periods when influenza viruses are circulating in the community | CDC](#))

[Clinical Practice Guidelines by the Infectious Diseases Society of America: 2018 Update on Diagnosis, Treatment, Chemoprophylaxis, and Institutional Outbreak Management of Seasonal Influenza | Clinical Infectious Diseases | Oxford Academic \(oup.com\)](#)

[Past Michigan Flu Focus Surveillance Reports](#)

[MDHHS Respiratory Virus Outbreaks in Skilled Nursing Homes Flow Diagram](#)

Step 4: Notification - LHD

Notify the LHD about any respiratory illness outbreak and coordinate with them on infection prevention practices at the facility.

- The presence or suspected presence of all **reportable diseases**, infections, and conditions are required to be reported to the appropriate local health department. The "appropriate local health department" could mean:
 - The local health department that has jurisdiction where an individual who has a disease or condition that is required to be reported resides.
 - OR
 - The local health department of the county in which your service facility is located.
- In some counties, the local health department where your facility is located desires to have all reports routed through them, regardless of where the infected individual resides. Please contact your local health department for information specific to reporting for your agency.

[Directory | Michigan Association for Local Public Health \(malph.org\)](#)

[Infection Prevention Resource and Assessment Team \(IPRAT\) \(michigan.gov\)](#)

[MDHHS Communicable Disease Reporting in Michigan](#)

[MDHHS Local Health Department Contact Information/ Maps](#)

[2023 MDHHS Reportable Diseases in Michigan - By Pathogen](#)

[2023 MDHHS Reportable Diseases in Michigan - By Condition](#) Contact IPRAT for assistance with mitigation strategies for managing the outbreak at mdhhs-iprat@michigan.gov.

Step 5: Quarantine/Isolation Duration

Quarantine

Duration of Empiric Transmission-Based Precautions for Symptomatic Residents Being Evaluated for <i>COVID-19</i> infection
<ul style="list-style-type: none">The IPC recommendations described below (e.g., patient placement, recommended PPE) also apply to patients with symptoms of COVID-19 (even before results of diagnostic testing) and asymptomatic patients who have met the criteria for empiric Transmission-Based Precautions based on close contact with someone with SARS-CoV-2 infection. However, these patients should NOT be cohorted with patients with confirmed SARS-CoV-2 infection through testing.The decision to discontinue empiric Transmission-Based Precautions by excluding the diagnosis of current SARS-CoV-2 infection for a resident with symptoms of COVID-19 can be made based upon having negative results from at least one viral test.<ul style="list-style-type: none">If using NAAT (molecular), a single negative test is sufficient in most circumstances. If a higher level of clinical suspicion for SARS-CoV-2 infection exists, consider maintaining Transmission-Based Precautions and confirming with a second negative NAAT.If using an antigen test, a negative result should be confirmed by either a negative NAAT (molecular) or second negative antigen test taken 48 hours after the first negative test.If a resident suspected of having SARS-CoV-2, RSV, or Influenza infection is never tested, the decision to discontinue Transmission-Based Precautions can be based on time from symptom onset as described in the Isolation section below. Ultimately, clinical judgement and suspicion of type of infection determine whether to continue or discontinue empiric Transmission-Based Precautions.
Duration of Empiric Transmission-Based Precautions for Asymptomatic Residents following Close Contact with Someone with a <i>COVID-19</i> Infection
<ul style="list-style-type: none">In general, asymptomatic residents do not require empiric use of Transmission-Based Precautions while being evaluated for SARS-CoV-2 following close contact with someone with SARS-CoV-2 infection. These residents should still wear source control and those who have not recovered from SARS-CoV-2 infection in the prior 30 days should be tested as described in the testing section.Examples of when empiric Transmission-Based Precautions following close contact may be considered include:<ul style="list-style-type: none">Resident is unable to be tested or wear source control as recommended for the 10 days following their exposureResident is moderately to severely immunocompromisedResident is residing on a unit with others who are moderately to severely immunocompromisedResident is residing on a unit experiencing ongoing SARS-CoV-2 transmission that is not controlled with initial interventionsResidents placed in empiric Transmission-Based Precautions based on close contact with someone with SARS-CoV-2 infection should be maintained in Transmission-Based Precautions for the following time periods.<ul style="list-style-type: none">Residents can be removed from Transmission-Based Precautions after day 7 following the exposure (count the day of exposure as day 0) if they do not develop symptoms and all viral testing as described for asymptomatic individuals following close contact is negative.If viral testing is not performed, residents can be removed from Transmission-Based Precautions after day 10 following the exposure (count the day of exposure as day 0) if they do not develop symptoms.
Infection Control: Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) CDC

Isolation

Duration of Transmission-Based Precautions for Residents with <i>COVID-19</i> Infection
<ul style="list-style-type: none">The following are criteria to determine when Transmission-Based Precautions could be discontinued for residents with SARS-CoV-2 infection and are influenced by severity of symptoms and presence of immunocompromising conditions. Residents should be monitored and re-evaluated for symptom recurrence or worsening (either through self-monitoring or by caregiver). If symptoms recur (e.g., rebound), these residents should be placed

Guidance in this document is up to date as of July 18th, 2023.

back into isolation until they again meet the healthcare criteria below to discontinue Transmission-Based Precautions for SARS-CoV-2 infection unless an alternative diagnosis is identified.
<ul style="list-style-type: none"> Residents with mild to moderate illness who are <i>not</i> moderately to severely immunocompromised: <ul style="list-style-type: none"> At least 10 days have passed <i>since symptoms first appeared</i> and At least 24 hours have passed <i>since last fever</i> without the use of fever-reducing medications and Symptoms (e.g., cough, shortness of breath) have improved
<ul style="list-style-type: none"> Residents who were asymptomatic throughout their infection and are <i>not</i> moderately to severely immunocompromised: <ul style="list-style-type: none"> At least 10 days have passed since the date of their first positive viral test.
<ul style="list-style-type: none"> Residents with severe to critical illness and who are <i>not</i> moderately to severely immunocompromised: <ul style="list-style-type: none"> At least 10 days and up to 20 days have passed <i>since symptoms first appeared</i> and At least 24 hours have passed <i>since last fever</i> without the use of fever-reducing medications and Symptoms (e.g., cough, shortness of breath) have improved. The test-based strategy as described for moderately to severely immunocompromised residents can be used to inform the duration of isolation.
<ul style="list-style-type: none"> In general, residents should continue to wear source control until symptoms resolve or, for those who never developed symptoms, until they meet the criteria to end isolation. Then they should revert to usual facility source control policies for residents.
Infection Control: Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) CDC
Duration of Transmission-Based Precautions for residents with suspected or confirmed <i>Respiratory Syncytial Virus (RSV)</i>
<ul style="list-style-type: none"> People infected with RSV are usually contagious for 3 to 8 days and may become contagious a day or two before they start showing signs of illness. However, some infants, and people with weakened immune systems, can continue to spread the virus even after they stop showing symptoms, for as long as 4 weeks. Children are often exposed to and infected with RSV outside the home, such as in school or childcare centers. They can then transmit the virus to other members of the family. In immunocompromised residents, extend the duration of Contact Precautions due to prolonged shedding. Reliability of antigen testing to determine when to remove patients with prolonged hospitalizations from Contact Precautions uncertain.
Transmission of RSV (Respiratory Syncytial Virus) CDC
Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings (2007) (cdc.gov)
Duration of Transmission-Based Precautions for residents with suspected or confirmed <i>Influenza</i>
<ul style="list-style-type: none"> <i>Droplet precautions</i> should be implemented for residents with suspected or confirmed influenza for <i>7 days after illness onset or until 24 hours after the resolution of fever and respiratory symptoms, whichever is longer</i>, while a resident is in a healthcare facility. In some cases, facilities may choose to apply droplet precautions for longer periods based on clinical judgment, such as in the case of young children or severely immunocompromised residents, who may shed influenza virus for longer periods of time.
Prevention Strategies for Seasonal Influenza in Healthcare Settings CDC
<p>For more information about making decisions on resident placement for droplet precautions:</p> <p>Isolation Precautions Guidelines Library Infection Control CDC</p>

Part Two: Appendices

Appendix 1: AGP Precautions

Infection Control: Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) CDC
<ul style="list-style-type: none">Refer to bottom of the page for “Infection Control FAQ” section and see question, “Which procedures are considered aerosol generating procedures in healthcare settings?”
Air Exchange Table / CDC
Interactive Ventilation Tool CDC

Appendix 2: Hand Hygiene

Healthcare Providers Hand Hygiene CDC
Hand Hygiene Audit Tool / CDC
Clean Hands Count Campaign Hand Hygiene CDC

Appendix 3: PPE Donning/Doffing

Sequence for Donning Personal Protective Equipment (PPE) (cdc.gov)
Personal Protective Equipment Use Tracking Tools NIOSH CDC

Appendix 4: Cleaning and Disinfection & Clean to Dirty Workflow

Best Practices for Environmental Cleaning in Healthcare Facilities: in Resource Limited Settings / CDC
Environmental Services / CDC
Environmental Cleaning Procedures / CDC
Cleaning and Disinfection Strategies for Noncritical Surfaces and Equipment / CDC
Environmental Cleaning Supplies and Equipment / CDC
Strategies to Mitigate Cross Contamination of Non-critical Medical Devices / APIC
Environmental Services - APIC

Appendix 6: Treatment

COVID-19 Therapeutics Information Page (michigan.gov)
MDHHS Healthcare Provider COVID-19 Outpatient Therapy Toolkit

Appendix 7: Crisis Staffing

Nurse Aide Training Programs Map
Nurse Aide Training Program (michigan.gov)
Strategies to Mitigate Healthcare Personnel Staffing Shortages CDC

Appendix 8: COVID Relief Facilities: Devoted vs. Designated Staff

Numbered-Letter-L-23-13.pdf (michigan.gov)
Numbered-Letter-L-23-32-SNF-final.pdf (michigan.gov)
2023 Medicaid Provider L Letters (michigan.gov)

Droplet & Airborne Precautions

VISITORS: Please speak with nurse prior to entering room

**Clean Hands Prior
to Entering and
Upon Leaving**



N95 Respirator PAPR

***Fit Testing and Training Required**

Gown & Gloves



N95



PAPR

Eye Protection



***Wear eye
protection for
potential exposure**

**Keep Room
Door Closed**



**Practice Delayed
Entry Time**



**Use Dedicated or Disposable
Equipment**



Droplet Precautions

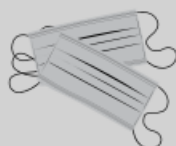


VISITORS: **Please speak with nurse prior to entering room**

PROVIDERS & STAFF
**Clean Hands Prior To
Entering And Upon
Leaving**



PROVIDERS & STAFF
Wear A Surgical Mask



Surgical Mask

PROVIDERS & STAFF
Wear Eye Protection



***Wear eye
protection for
potential
exposure**

PROVIDERS & STAFF
**Use Dedicated or
Disposable Equipment**





Contact Precautions



VISITORS: Please speak with nurse prior to entering room

EVERYONE

Clean hands
prior to entering



NECESSARY PPE

Gown and
gloves



PROVIDERS & STAFF

Use dedicated or
disposable
equipment



EVERYONE

Clean hands upon
leaving



PROVIDERS & STAFF

Discard gloves
and gown before
room exit



PROVIDERS & STAFF

Do not wear the same
gown and gloves for the
care of more than one
person

No!



PROVIDERS & STAFF

Clean and disinfect reusable
equipment before use on another
person

STOP

Aerosol-Generating Procedure (AGP) in Progress

AGP Start Time:

AGP End Time:

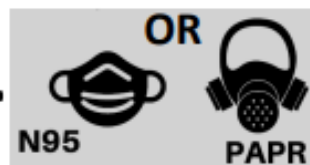
Entry Time:

(AGP End Time + Delayed Entry Time)

PPE



+



+



+



Appendix 10: Isolation Checklist

Supply Checklist for Isolation Room or Area

Equipment	Stock Present
On PPE Cart:	
Eye Protection (face shield or goggles)	
Gloves	
Particulate respirators (N95 or equivalent)	
Medical (surgical or procedure) masks	
Gowns	
Available in or near the room/ area:	
Alcohol-based hand rub	
Plain soap (liquid, if possible, for washing hands in clean water)	
Clean single-use towels (e.g., paper towels)	
Sharps containers	
Appropriate detergent for environmental cleaning and disinfectant for disinfection of surfaces, instruments or equipment (Should be on the EPA List N)	
Large plastic bags in waste bins	
Appropriate biohazard bags	
Linen bags	

*Adapted from [World Health Organization: Infection Prevention and Control of Epidemic- and Pandemic-Prone Acute Respiratory Infections in Health Care](#)